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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,488	08/27/2003	Joseph L. McJunkins	7041C	5867

7590 04/05/2007
Vivien Y. Tsang, Esq.
The Sherwin-Williams Company - Legal Dept.
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Cleveland, OH 44115

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/649,488

Applicant(s)

MCJUNKINS ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/3/07 has been entered.

2. All outstanding rejections are overcome by applicants' amendment filed 1/3/07.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites ink comprising "between about 40% to about 60% pigment dispersion" and "between about 20% to about 60% of an alkyd-stabilized acrylic dispersion" and also recites that the ratio of the alkyd-stabilized acrylic dispersion to the pigment dispersion is "from about 45:55 to about 55:45". Thus, the scope of the claim is confusing because it is not clear how the

pigment dispersion and the alkyd-stabilized acrylic dispersion can be present in amounts of about 40 to about 60% and about 20% to about 60%, respectively, which encompasses weight ratio of alkyd-stabilized acrylic dispersion to pigment dispersion of 0.3-1.5 (20/60 – 60/40) and be present in ratio of from about 45:55 to about 55:45, i.e. 0.82-1.2. That is, when, for instance, the amount of alkyd-stabilized acrylic dispersion is 20% and the amount of pigment dispersion is 60%, the ratio of alkyd-stabilized acrylic dispersion to pigment dispersion is 0.3 which is outside the ratio “from about 45:55 to about 55:45” which is also disclosed in the claim. Thus, the scope of the claim is confusing given that it is not clear what amounts of alkyd-stabilized acrylic dispersion and pigment dispersion are required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 4-5, 7-8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasawa et al. (U.S. 5,846,307) in view of EP 555503 and Wakimoto et al. (U.S. 3,734,872).

Nagasawa et al. disclose ink comprising pigment dispersion, 0.1-20%, preferably 0.5-10%, alkyd-modified acrylic polymer, and 3-50% ink solvent. It is disclosed that the pigment dispersion comprises 50% pigment while the ink comprises 5-10% pigment. Thus, it is calculated that the ink must comprise 10-20% pigment dispersion. It is further calculated that the ratio of alkyd-modified acrylic polymer to pigment dispersion is 0.005 (0.1/20)-2 (20/10), preferably, 0.025 (0.5/20) – 1 (10/10) (col.1, lines 5-8, col.2, lines 42-43, col.6, lines 9-13 and 17-21, col.7, lines 20-23, 39-40, and 64-67, and col.8, lines 11-12 and 24-42).

The difference between Nagasawa et al. and the present claimed invention is the requirement in the claims of specific alkyd-modified acrylic.

EP 555503 discloses composition comprising alkyd stabilized acrylic dispersion having non-volatile materials content greater than about 75% wherein the dispersion comprises 25-75%

alkyd resin obtained from triglyceride oil such as linseed oil, soya oil, and sunflower oil, 25-75% acrylic monomer including 1-35% hydroxy-functional monomer, 0.1-6% chain transfer agent, and oil. It is further disclosed that the alkyd possesses z-average molecular weight of 10,000-250,000, non-volatile material in an amount greater than about 75%, preferably at least about 90%, oil length of 65-85%, acid value less than 20, and viscosity less than 60,000 cP, preferably 10,000, measured using Brookfield viscometer with #3 spindle at 12 rpm (page 2, lines 41-52, page 2, line 55-page 3, line 1, page 3, lines 5-14 and 40-45, page 4, lines 7-12, 15-20, and 30-32, page 4, line 53-page 5, line 6, page 5, lines 25 and 41-44). The motivation for using such alkyd-stabilized acrylic dispersion is that it exhibits excellent stability, low grit, filterability, viscosity and dry time (page 2, lines 34-36 and page 3, lines 15-18).

It is noted that while EP 555503 broadly discloses that the alkyd-stabilized acrylic dispersion is used in coating compositions (page 5, line 24), there is no disclosure that the alkyd-stabilized acrylic dispersion is suitable for use in inks. On the one hand, the broad disclosure of coating composition clearly encompasses inks that are applied to or coat paper. On the other hand, as set forth in col. 1, lines 17-18 of Wakimoto et al., both paints and inks utilize alkyd stabilized acrylic dispersions. Thus, it is clear that alkyd stabilized acrylic dispersions suitable for use in paint, as disclosed by EP 555503, would also be suitable for use in inks, as disclosed by Nagasawa et al.

In light of the motivation for using alkyd-stabilized acrylic dispersion disclosed by EP 555503 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such alkyd-stabilized acrylic dispersion in Nagasawa et al. in order to produce ink with

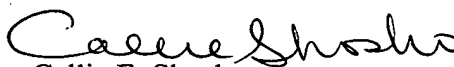
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excellent stability, low grit, filterability, viscosity and dry time, and thereby arrive at the claimed invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
4/1/07